

Proxity
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RAW SEQUENCE LISTING
PATENT APPLICATION US/09/261,329

DATE: 08/25/1999
TIME: 09:29:32

Input Set: I261329.RAW

This Raw Listing contains the General Information
Section and up to first 5 pages.

ENTERED

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1  <110> APPLICANT: Andersen, Kim
2      Schulein, Martin
3      Christiansen, Lars
4      Damgaard, Bo
5      Von Der Osten, Claus
6  <120> TITLE OF INVENTION: Cellulase Variants
7  <130> FILE REFERENCE: 4887.204-US
8  <140> CURRENT APPLICATION NUMBER: US/09/261,329
9  <141> CURRENT FILING DATE: 1999-03-03
10 <150> EARLIER APPLICATION NUMBER: 1013/96
11 <151> EARLIER FILING DATE: 1996-09-17
12 <160> NUMBER OF SEQ ID NOS: 26
13 <170> SOFTWARE: FastSEQ for Windows Version 3.0
14 <210> SEQ ID NO 1
15 <211> LENGTH: 202
16 <212> TYPE: PRT
17 <213> ORGANISM: Cellulase variants
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19     Ala Asp Gly Arg Ser Thr Arg Tyr Trp Asp Cys Cys Lys Pro Ser Cys
20         1             5             10             15
21     Gly Trp Ala Lys Lys Ala Pro Val Asn Gln Pro Val Phe Ser Cys Asn
22             20             25             30
23     Ala Asn Phe Gln Arg Ile Thr Asp Phe Asp Ala Lys Ser Gly Cys Glu
24             35             40             45
25     Pro Gly Gly Val Ala Tyr Ser Cys Ala Asp Gln Thr Pro Trp Ala Val
26             50             55             60
27     Asn Asp Asp Phe Ala Leu Gly Phe Ala Ala Thr Ser Ile Ala Gly Ser
28             65             70             75             80
29     Asn Glu Ala Gly Trp Cys Cys Ala Cys Tyr Glu Leu Thr Phe Thr Ser
30             85             90             95
31     Gly Pro Val Ala Gly Lys Lys Met Val Val Gln Ser Thr Ser Thr Gly
32             100            105            110
33     Gly Asp Leu Gly Ser Asn His Phe Asp Leu Asn Ile Pro Gly Gly Gly
34             115            120            125
35     Val Gly Ile Phe Asp Gly Cys Thr Pro Gln Phe Gly Gly Leu Pro Gly
36             130            135            140
37     Gln Arg Tyr Gly Gly Ile Ser Ser Arg Asn Glu Cys Asp Arg Phe Pro
38             145            150            155            160
39     Asp Ala Leu Lys Pro Gly Cys Tyr Trp Arg Phe Asp Trp Phe Lys Asn
40             165            170            175
41     Ala Asp Asn Pro Ser Phe Ser Phe Arg Gln Val Gln Cys Pro Ala Glu
42             180            185            190
43     Leu Val Ala Arg Thr Gly Cys Arg Arg Ala
44             195            200

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45 <210> SEQ ID NO 2
46 <211> LENGTH: 202
47 <212> TYPE: PRT
48 <213> ORGANISM: Cellulase variants
49 <400> SEQUENCE: 2
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51     1           5           10           15
52   Ala Trp Asp Glu Lys Ala Ala Val Ser Arg Pro Val Thr Thr Cys Asp
53           20           25           30
54   Arg Asn Asn Ser Pro Leu Ser Pro Gly Ala Val Ser Gly Cys Asp Pro
55           35           40           45
56   Asn Gly Val Ala Phe Thr Cys Asn Asp Asn Gln Pro Trp Ala Val Asn
57           50           55           60
58   Asn Asn Val Ala Tyr Gly Phe Ala Ala Thr Ala Phe Pro Gly Gly Asn
59           65           70           75           80
60   Glu Ala Ser Trp Cys Cys Ala Cys Tyr Ala Leu Gln Phe Thr Ser Gly
61           85           90           95
62   Pro Val Ala Gly Lys Thr Met Val Val Gln Ser Thr Asn Thr Gly Gly
63           100          105          110
64   Asp Leu Ser Gly Thr His Phe Asp Ile Gln Met Pro Gly Gly Gly Leu
65           115          120          125
66   Gly Ile Phe Asp Gly Cys Thr Pro Gln Phe Gly Phe Thr Phe Pro Gly
67           130          135          140
68   Asn Arg Tyr Gly Gly Thr Thr Ser Arg Ser Gln Cys Ala Glu Leu Pro
69           145          150          155          160
70   Ser Val Leu Arg Asp Gly Cys His Trp Arg Tyr Asp Trp Phe Asn Asp
71           165          170          175
72   Ala Asp Asn Pro Asn Val Asn Trp Arg Arg Val Arg Cys Pro Ala Ala
73           180          185          190
74   Leu Thr Asn Arg Ser Gly Cys Val Arg Ala
75           195          200
76 <210> SEQ ID NO 3
77 <211> LENGTH: 202
78 <212> TYPE: PRT
79 <213> ORGANISM: cellulase variants
80 <400> SEQUENCE: 3
81   Gly Thr Gly Arg Thr Thr Arg Tyr Trp Asp Cys Cys Lys Pro Ser Cys
82     1           5           10           15
83   Gly Trp Asp Glu Lys Ala Ser Val Ser Gln Pro Val Lys Thr Cys Asp
84           20           25           30
85   Arg Asn Asn Asn Pro Leu Ala Ser Thr Ala Arg Ser Gly Cys Asp Ser
86           35           40           45
87   Asn Gly Val Ala Tyr Thr Cys Asn Asp Asn Gln Pro Trp Ala Val Asn
88           50           55           60
89   Asp Asn Leu Ala Tyr Gly Phe Ala Ala Thr Ala Phe Ser Gly Gly Ser
90           65           70           75           80
91   Glu Ala Ser Trp Cys Cys Ala Cys Tyr Ala Leu Gln Phe Thr Ser Gly
92           85           90           95
93   Pro Val Ala Gly Lys Thr Met Val Val Gln Ser Thr Asn Thr Gly Gly
94           100          105          110

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95      Asp Leu Ser Gly Asn His Phe Asp Ile Leu Met Pro Gly Gly Gly Leu
96              115                      120                      125
97      Gly Ile Phe Asp Gly Cys Thr Pro Gln Trp Gly Val Ser Phe Pro Gly
98              130                      135                      140
99      Asn Arg Tyr Gly Gly Thr Thr Ser Arg Ser Gln Cys Ser Gln Ile Pro
100     145                      150                      155                      160
101     Ser Ala Leu Gln Pro Gly Cys Asn Trp Arg Tyr Asp Trp Phe Asn Asp
102                      165                      170                      175
103     Ala Asp Asn Pro Asp Val Ser Trp Arg Arg Val Gln Cys Pro Ala Ala
104                      180                      185                      190
105     Leu Thr Asp Arg Thr Gly Cys Arg Arg Ala
106              195                      200
107 <210> SEQ ID NO 4
108 <211> LENGTH: 201
109 <212> TYPE: PRT
110 <213> ORGANISM: Cellulase variants
111 <400> SEQUENCE: 4
112     Gly Ser Gly Lys Ser Thr Arg Tyr Trp Asp Cys Cys Lys Pro Ser Cys
113         1              5              10              15
114     Ala Trp Ser Gly Lys Ala Ser Val Asn Arg Pro Val Leu Ala Cys Asp
115              20              25              30
116     Ala Asn Asn Asn Pro Leu Asn Asp Ala Asn Val Lys Ser Gly Cys Asp
117              35              40              45
118     Gly Gly Ser Ala Tyr Thr Cys Ala Asn Asn Ser Pro Trp Ala Val Asn
119              50              55              60
120     Asp Asn Leu Ala Tyr Gly Phe Ala Ala Thr Lys Leu Ser Gly Gly Thr
121     65              70              75              80
122     Glu Ser Ser Trp Cys Cys Ala Cys Tyr Ala Leu Thr Phe Thr Ser Gly
123              85              90              95
124     Pro Val Ser Gly Lys Thr Leu Val Val Gln Ser Thr Ser Thr Gly Gly
125              100             105             110
126     Asp Leu Gly Ser Asn His Phe Asp Leu Asn Met Pro Gly Gly Gly Val
127              115             120             125
128     Gly Leu Phe Asp Gly Cys Lys Arg Glu Phe Gly Gly Leu Pro Gly Ala
129              130             135             140
130     Gln Tyr Gly Gly Ile Ser Ser Arg Ser Glu Cys Asp Ser Phe Pro Ala
131     145             150             155             160
132     Ala Leu Lys Pro Gly Cys Gln Trp Arg Phe Asp Trp Phe Lys Asn Ala
133              165             170             175
134     Asp Asn Pro Glu Phe Thr Phe Lys Gln Val Gln Cys Pro Ser Glu Leu
135              180             185             190
136     Thr Ser Arg Thr Gly Cys Lys Arg Ala
137              195             200
138 <210> SEQ ID NO 5
139 <211> LENGTH: 201
140 <212> TYPE: PRT
141 <213> ORGANISM: Cellulase variants
142 <400> SEQUENCE: 5
143     Gly Ser Gly Gln Ser Thr Arg Tyr Trp Asp Cys Cys Lys Pro Ser Cys
144         1              5              10              15

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145      Ala Trp Pro Gly Lys Ala Ala Val Ser Gln Pro Val Tyr Ala Cys Asp
146              20                      25                      30
147      Ala Asn Phe Gln Arg Leu Ser Asp Phe Asn Val Gln Ser Gly Cys Asn
148              35                      40                      45
149      Gly Gly Ser Ala Tyr Ser Cys Ala Asp Gln Thr Pro Trp Ala Val Asn
150              50                      55                      60
151      Asp Asn Leu Ala Tyr Gly Phe Ala Ala Thr Ser Ile Ala Gly Gly Ser
152      65              70                      75                      80
153      Glu Ser Ser Trp Cys Cys Ala Cys Tyr Ala Leu Thr Phe Thr Ser Gly
154              85                      90                      95
155      Pro Val Ala Gly Lys Thr Met Val Val Gln Ser Thr Ser Thr Gly Gly
156              100                     105                     110
157      Asp Leu Gly Ser Asn Gln Phe Asp Ile Ala Met Pro Gly Gly Gly Val
158              115                     120                     125
159      Gly Ile Phe Asn Gly Cys Ser Ser Gln Phe Gly Gly Leu Pro Gly Ala
160              130                     135                     140
161      Gln Tyr Gly Gly Ile Ser Ser Arg Asp Gln Cys Asp Ser Phe Pro Ala
162      145              150                     155                     160
163      Pro Leu Lys Pro Gly Cys Gln Trp Arg Phe Asp Trp Phe Gln Asn Ala
164              165                     170                     175
165      Asp Asn Pro Thr Phe Thr Phe Gln Gln Val Gln Cys Pro Ala Glu Ile
166              180                     185                     190
167      Val Ala Arg Ser Gly Cys Lys Arg Ala
168              195                     200
169      <210> SEQ ID NO 6
170      <211> LENGTH: 203
171      <212> TYPE: PRT
172      <213> ORGANISM: Cellulase variants
173      <400> SEQUENCE: 6
174      Gly Ser Gly His Ser Thr Arg Tyr Trp Asp Cys Cys Lys Pro Ser Cys
175      1              5                      10                      15
176      Ser Trp Ser Gly Lys Ala Ala Val Asn Ala Pro Ala Leu Thr Cys Asp
177              20                      25                      30
178      Lys Asn Asp Asn Pro Ile Ser Asn Thr Asn Ala Val Asn Gly Cys Glu
179              35                      40                      45
180      Gly Gly Gly Ser Ala Tyr Ala Cys Thr Asn Tyr Ser Pro Trp Ala Val
181              50                      55                      60
182      Asn Asp Glu Leu Ala Tyr Gly Phe Ala Ala Thr Lys Ile Ser Gly Gly
183      65              70                      75                      80
184      Ser Glu Ala Ser Trp Cys Cys Ala Cys Tyr Ala Leu Thr Phe Thr Thr
185              85                      90                      95
186      Gly Pro Val Lys Gly Lys Lys Met Ile Val Gln Ser Thr Asn Thr Gly
187              100                     105                     110
188      Gly Asp Leu Gly Asp Asn His Phe Asp Leu Met Met Pro Gly Gly Gly
189              115                     120                     125
190      Val Gly Ile Phe Asp Gly Cys Thr Ser Glu Phe Gly Lys Ala Leu Gly
191              130                     135                     140
192      Gly Ala Gln Tyr Gly Gly Ile Ser Ser Arg Ser Glu Cys Asp Ser Tyr
193      145              150                     155                     160
194      Pro Glu Leu Leu Lys Asp Gly Cys His Trp Arg Phe Asp Trp Phe Glu

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195              165              170              175
196      Asn Ala Asp Asn Pro Asp Phe Thr Phe Glu Gln Val Gln Cys Pro Lys
197              180              185              190
198      Ala Leu Leu Asp Ile Ser Gly Cys Lys Arg Ala
199              195              200
200 <210> SEQ ID NO 7
201 <211> LENGTH: 205
202 <212> TYPE: PRT
203 <213> ORGANISM: Cellulase variants
204 <400> SEQUENCE: 7
205      Gly Ile Gly Gln Thr Thr Arg Tyr Trp Asp Cys Cys Lys Pro Ser Cys
206      1              5              10              15
207      Ala Trp Pro Gly Lys Gly Pro Ser Ser Pro Val Gln Ala Cys Asp Lys
208              20              25              30
209      Asn Asp Asn Pro Phe Asn Asp Gly Gly Ser Thr Arg Ser Gly Cys Asp
210              35              40              45
211      Ala Gly Gly Ser Ala Tyr Met Cys Ser Ser Gln Ser Pro Trp Ala Val
212              50              55              60
213      Ser Asp Glu Leu Ser Tyr Gly Trp Ala Ala Val Lys Leu Ala Gly Ser
214      65              70              75              80
215      Ser Glu Ser Gln Trp Cys Cys Ala Cys Tyr Glu Leu Thr Phe Thr Ser
216              85              90              95
217      Gly Pro Val Ala Gly Lys Lys Met Ile Val Gln Ala Thr Asn Thr Gly
218              100              105              110
219      Gly Asp Leu Gly Asp Asn His Phe Asp Leu Ala Ile Pro Gly Gly Gly
220              115              120              125
221      Val Gly Ile Phe Asn Ala Cys Thr Asp Gln Tyr Gly Ala Pro Pro Asn
222              130              135              140
223      Gly Trp Gly Asp Arg Tyr Gly Gly Ile His Ser Lys Glu Glu Cys Glu
224      145              150              155              160
225      Ser Phe Pro Glu Ala Leu Lys Pro Gly Cys Asn Trp Arg Phe Asp Trp
226              165              170              175
227      Phe Gln Asn Ala Asp Asn Pro Ser Val Thr Phe Gln Glu Val Ala Cys
228              180              185              190
229      Pro Ser Glu Leu Thr Ser Lys Ser Gly Cys Ser Arg Ala
230              195              200              205
231 <210> SEQ ID NO 8
232 <211> LENGTH: 203
233 <212> TYPE: PRT
234 <213> ORGANISM: Cellulase variants
235 <400> SEQUENCE: 8
236      Thr Ala Gly Val Thr Thr Arg Tyr Trp Asp Cys Cys Lys Pro Ser Cys
237      1              5              10              15
238      Gly Trp Ser Gly Lys Ala Ser Val Ser Ala Pro Val Arg Thr Cys Asp
239              20              25              30
240      Arg Asn Gly Asn Thr Leu Gly Pro Asp Val Lys Ser Gly Cys Asp Ser
241              35              40              45
242      Gly Gly Thr Ser Phe Thr Cys Ala Asn Asn Gly Pro Phe Ala Ile Asp
243              50              55              60
244      Asn Asn Thr Ala Tyr Gly Phe Ala Ala Ala His Leu Ala Gly Ser Ser

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VERIFICATION SUMMARY
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Line ? Error/Warning

Original Text
